AMENDED LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in this application:

1. (Currently amended)   A method for determining therapeutic resonant frequencies of electromagnetic radiation for ~~treating an animal or human infected with a disease caused by a pathogen, wherein said pathogen comprises a genomic material,~~ influencing a genomic material, wherein the genomic material is associated with a disease-causing pathogen, or is implicated in causation of disease, the genomic material being surrounded by a medium, comprising:

   providing a frequency-emitting device;

   determining a velocity of the electromagnetic radiation through the medium surrounding the genomic material;

   determining a ~~a~~ the length of the genomic material;

   determining a first therapeutic resonant frequency to influence the genomic material in a first electromagnetic frequency range, by dividing the velocity of the electromagnetic radiation through the medium surrounding the genomic material by the length of the genomic material;

   dividing or multiplying the first therapeutic resonant frequency by a factor of a power of two, to obtain ~~at least one other~~ a second therapeutic resonant frequency to influence said genomic material in ~~at least one other~~ an electromagnetic frequency range capable of being emitted by the frequency-emitting device;

   programming the frequency-emitting device to emit ~~at least one~~ the first, or the second resonant frequency; ~~in its range of capability;~~ and

   ~~influencing the disease-associated genomic material~~ treating the animal or human with ~~at least one~~ the programmed resonant frequency intended to influence said genomic material, ~~emitted from the frequency-emitting device, thereby debilitating the genomic material or the pathogen associated with the genomic material, and~~ thereby rendering a therapeutic or desirable effect ~~to the host or system~~ in the animal or human.

2. (Currently Amended)   The method of claim 1, wherein determining the length of the ~~disease-associated~~ genomic material comprises using the known spacing value between adjacent base pairs or bases, determining the number of base pairs or bases in the genomic material, and multiplying the number of base pairs or bases in the genomic material by the known spacing value between adjacent base pairs or bases ~~and using the resulting value as a wavelength~~.

3. (Canceled)

4. (Currently Amended)   The method of claim 1, wherein the medium surrounding the ~~disease-associated~~ genomic material ~~is in-vivo tissue having~~ has electrical permittivity and magnetic permeability, wherein determining the velocity of the electromagnetic radiation through the medium surrounding the genomic material comprises relating the electrical permittivity and magnetic permeability ~~of in-vivo tissue~~ to the velocity, wherein the velocity = 1 / $\sqrt{(\varepsilon\,\mu)}$, where ε is the electrical permittivity of the medium, and μ is the magnetic permeability of the medium.

5. (Currently amended)   The ~~method~~ methods of claim 4 and claim 1, further comprising the step of determining a refractive index of the electromagnetic radiation through the ~~in-vivo tissue~~ medium surrounding the genomic material by dividing the speed of light in a vacuum by the speed of light ~~in the in-vivo tissue~~ through said medium, wherein dividing ~~one resonant~~ a frequency determined for the ~~disease-associated~~ genomic material surrounded by air by the refractive index for ~~in-vivo tissue~~ said medium yields ~~a~~ the first resonant frequency for the genomic material surrounded by ~~in-vivo tissue~~ said medium.

6. (Currently amended)   The method of claim 1, further comprising the steps of:

dividing at least one of the previously calculated resonant ~~frequency~~ frequencies by a positive integer to determine subharmonic frequencies,

multiplying at least one of the previously calculated resonant ~~frequency~~ frequencies by a positive integer to determine harmonic frequencies,

additionally programming the frequency-emitting device to emit ~~the harmonic and/or~~
~~subharmonic~~ one or more of the said subharmonic or harmonic frequencies, and

~~influencing the disease-associated genomic material~~ treating the animal or human with ~~at~~
~~least one resonant frequency and/or at least one harmonic and/or subharmonic~~ one or more of the
said subharmonic or harmonic frequencies. ~~when the frequency-emitting device emits at least~~
~~one resonant frequency and/or the harmonic and/or subharmonic frequencies into the medium~~
~~surrounding the genomic material~~.

7. (Cancelled)

8. (Cancelled)

9. (Currently Amended)   The ~~method~~ methods of claim 1 and claim 6, wherein ~~influencing a~~
~~disease-associated genomic material~~ treating a human with ~~at least one~~ the said first or second
resonant frequency, or one of the said subharmonic or harmonic frequencies, comprises
influencing said genomic material present in humans.

10. (Currently Amended)   The ~~method~~ methods of claim 1 and claim 6, wherein ~~influencing a~~
~~disease-associated genomic material~~ treating an animal with ~~at least one~~ the said first or second
resonant frequency, or one of the said subharmonic or harmonic frequencies, comprises
influencing said genomic material present in animals.

11. (Cancelled)

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (New)   A method for determining therapeutic resonant frequencies of electromagnetic radiation for treating an animal or human that suffers from a disease with the presence of genomic material, wherein said genomic material causes, worsens, or aggravates said disease, the genomic material being surrounded by a medium, comprising:

    providing a frequency-emitting device;

    determining a velocity of the electromagnetic radiation through the medium surrounding the genomic material;

    determining the length of the genomic material;

    determining a first therapeutic resonant frequency to influence the genomic material in a first electromagnetic frequency range, by dividing the velocity of the electromagnetic radiation through the medium surrounding the genomic material by the length of the genomic material;

    dividing or multiplying the first therapeutic resonant frequency by a factor of a power of two, to obtain a second therapeutic resonant frequency to influence said genomic material in an electromagnetic frequency range capable of being emitted by the frequency-emitting device;

    programming the frequency-emitting device to emit the first, or the second resonant frequency; and

treating the animal or human with the programmed resonant frequency intended to influence said genomic material, thereby rendering a therapeutic or desirable effect in the animal or human.

31. (New)   The method of claim 30, wherein determining the length of the genomic material comprises using the known spacing value between adjacent base pairs or bases, determining the number of base pairs or bases in the genomic material, and multiplying the number of base pairs or bases in the genomic material by the known spacing value between adjacent base pairs or bases.

32. (New)   The method of claim 30, wherein the medium surrounding the genomic material has electrical permittivity and magnetic permeability, wherein determining the velocity of the electromagnetic radiation through the medium surrounding the genomic material comprises relating the electrical permittivity and magnetic permeability to the velocity, wherein the velocity = $1 / \sqrt{(\varepsilon \mu)}$, where ε is the electrical permittivity of the medium, and μ is the magnetic permeability of the medium.

33. (New)   The methods of claim 32 and claim 30, further comprising the step of determining a refractive index of the electromagnetic radiation through the medium surrounding the genomic material by dividing the speed of light in a vacuum by the speed of light through said medium, wherein dividing a frequency determined for the genomic material surrounded by air by the refractive index for said medium yields the first resonant frequency for the genomic material surrounded by said medium.

34. (New)   The method of claim 30, further comprising the steps of:

dividing at least one of the previously calculated resonant frequencies by a positive integer to determine subharmonic frequencies,

multiplying at least one of the previously calculated resonant frequencies by a positive integer to determine harmonic frequencies,

additionally programming the frequency-emitting device to emit one or more of the said subharmonic or harmonic frequencies, and

treating the animal or human with one or more of the said subharmonic or harmonic frequencies.

35. (New)   The methods of claim 30 and claim 34, wherein treating a human with the said first or second resonant frequency, or one of the said subharmonic or harmonic frequencies, comprises influencing said genomic material present in humans.

36. (New)   The methods of claim 30 and claim 34, wherein treating an animal with the said first or second resonant frequency, or one of the said subharmonic or harmonic frequencies, comprises influencing said genomic material present in animals.

SUMMARY OF PHONE INTERVIEW

The applicant thanks examiner Moran for the telephone interviews which took place on August 10 and September 8, 2006. These discussions primarily dealt with possible claim wording changes that would overcome the claim objections stated in the office's most recent response mailed on June 30, 2006. The discussions also worked towards making the claims read clearly, smoothly, and to reconsider terms that might be legally or otherwise ambiguous for the reader. There was also discussion of the scope of the claims and how they relate to the current specification.